

In the Claims:

1. (Currently amended) A thin-film LED comprising:  
an active layer (7), which emits electromagnetic radiation (19) in a main radiation direction; [(15),]

a current expansion layer (9), which is disposed downstream of the active layer (7) in the main radiation direction (15) and is made of a first nitride compound semiconductor material;

[[,]] a main area (14), through which the radiation (19) emitted in the main radiation direction (15) is coupled out; [[,]] and

a first contact layer (11, 12, 13) arranged on the main area (14),

~~characterized in that~~ wherein

the transverse conductivity of the current expansion layer (9) is increased by formation of a two-dimensional electron gas or hole gas.

2. (Currently amended) The thin-film LED as claimed in claim 1,

~~characterized in that~~ wherein

in order to form a two-dimensional electron or hole gas in the current expansion layer (9), at least one layer (10) made of a second nitride compound semiconductor material having a larger electronic band gap than the first nitride compound semiconductor material is embedded in the current expansion layer (9).

3. (Currently amended) The thin-film LED as claimed in claim 2,  
~~characterized in that~~ wherein  
a plurality of layers (~~10a, 10b, 10e~~) made of the second nitride compound semiconductor material are embedded in the current expansion layer (~~9~~).

4. (Currently amended) The thin-film LED as claimed in claim 2 ~~or 3~~,  
~~characterized in that~~ wherein  
the number of layers (~~10a, 10b, 10e~~) made of the second nitride compound semiconductor material is between 1 and 5 inclusive.

5. (Currently amended) The thin-film LED as claimed in claim 2, ~~one of claims 2 to 4~~,  
~~characterized in that~~ wherein  
the at least one layer (~~10~~) made of the second nitride compound semiconductor material has a thickness of 10 nm to 100 nm.

6. (Currently amended) The thin-film LED as claimed in claim 2, ~~one of claims 2 to 5~~,  
~~characterized in that~~ wherein  
the first nitride compound semiconductor material is GaN.

7. (Currently amended) The thin-film LED as claimed in claim 2, ~~one of claims 2 to 6~~,

~~characterized in that~~ wherein

the second nitride compound semiconductor material is  $\text{Al}_x\text{Ga}_{1-x}\text{N}$  where  $0.1 \leq x \leq 0.2$ .

8. (Currently amended) The thin-film LED as claimed in claim 2, ~~one of claims 2 to 7~~,

~~characterized in that~~ wherein

the at least one layer ~~(10)~~ made of the second nitride compound semiconductor material has a doping, the dopant concentration being higher in the regions adjoining the current expansion layer ~~(9)~~ than in a central region of the layer ~~(10)~~.

9. (Currently amended) The thin-film LED as claimed in claim 2, ~~one of claims 2 to 8~~,

~~characterized in that~~ wherein

the first and second nitride compound semiconductor materials are ~~in each case~~ n-doped.

10. (Currently amended) The thin-film LED as claimed in claim 2, ~~one of claims 2 to 9~~,

~~characterized in that~~ wherein

the first nitride compound semiconductor material is p-doped and the second nitride compound semiconductor material is n-doped.

11. (Currently amended) The thin-film LED as claimed in claim 1, ~~one of the preceding claims~~,

~~characterized in that~~ wherein

the active layer (7) ~~has~~ includes  $\text{In}_x\text{Al}_y\text{Ga}_{1-x-y}\text{N}$  where  $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$  and  $x + y \leq 1$ .

12. (Currently amended) The thin-film LED as claimed in claim 1, ~~one of the preceding claims~~,

~~characterized in that~~ wherein

at least one edge length of the main area (14) is 400  $\mu\text{m}$  or more.

13. (Currently amended) The thin-film LED as claimed in claim 12,

~~characterized in that~~ wherein

at least one edge length of the main area ~~(14)~~ is 800  $\mu\text{m}$  or more.

14. (Currently amended) The thin-film LED as claimed in claim 1, ~~one of the preceding claims~~,

~~characterized in that~~ wherein

operation of the thin-film LED with a current intensity of 300 mA or more is provided.

15. (Currently amended) The thin-film LED as claimed in claim 1, ~~one of the preceding claims~~,

~~characterized in that~~ wherein

the first contact layer (11, 12, 13) comprises no aluminum.

16. (Currently amended) The thin-film LED as claimed in claim 1, ~~one of the preceding claims~~,

~~characterized in that~~ wherein

less than 15% of the total area of the main area (14) is covered by the first contact layer (11, 12, 13).

17. (Currently amended) The thin-film LED as claimed in claim 1, ~~one of the preceding claims~~,

~~characterized in that~~ wherein

the first contact layer (11, 12, 13) has a lateral structure comprising a contact area (11) and a plurality of contact webs (12, 13).

18. (Currently amended) The thin-film LED as claimed in claim 17,

~~characterized in that~~ wherein

the contact area (11) is surrounded by at least one frame-type contact web (13), the frame-type contact web (13) being connected to the contact area by means of at least one further contact web (12).

19. (Currently amended) The thin-film LED as claimed in claim 18,

~~characterized in that~~ wherein

the frame-type contact web (13) has a square, rectangular or circular form.

20. (Currently amended) The thin-film LED as claimed in claim 18 ~~or 19~~,

~~characterized in that~~ wherein

the number of frame-type contact webs ~~(13)~~ is one, two or three.

21. (Currently amended) The thin-film LED as claimed in claim 1, ~~one of the preceding claims,~~

~~characterized in that~~ wherein

a second contact layer ~~(5)~~, which reflects the emitted radiation, is provided on a side of the active layer ~~(7)~~ opposite to the first contact layer ~~(11, 12, 13)~~, the first contact layer ~~(11, 12, 13)~~ having a contact area ~~(11)~~ and the second contact layer ~~(5)~~ having a cutout ~~(18)~~ in a region opposite the contact area ~~(11)~~.